Docket No. 87289.2140 Application No. 09/917,904 Customer No. 30734

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Previously Presented) A method of predicting failure of gas sensors in an incubator environment comprising the steps of:

analyzing at least one gas sensor for lifetime adjustment;
adjusting a percentage gas sensor lifetime hours measurement for a gas sensor;

normalizing the adjusted measurement of the gas sensor;

calculating a measurement for the sensor of a percentage lifetime hours used for comparison with its respective maximum percentage hours for said gas sensor; and displaying a warning message to a user.

- 2. (Original) The method of claim 1, further comprising repeating the adjusting step every hour as determined by a cumulative clock in an embedded controller.
- 3. (Previously Presented) The method of claim 2, wherein the adjusted measurement of the gas sensor is normalized to an hour count and stored as a percentage measurement of lifetime hours used at a temperature of 20 degrees Celsius in said embedded controller.
- 4. (Previously Presented) The method of claim 3, further comprising: holding a gas concentration and a gas sensor temperature constant over a previous hour prior to performing the normalizing step.

- 5. (Previously Presented) The method of claim 3, wherein the embedded controller tracks O₂ and CO₂ values by percentage.
- 6. (Previously Presented) The method of claim 1, wherein the step of displaying a warning message to a user occurs once the percentage gas sensor lifetime hours measurement exceeds a percentage of said respective maximum percentage hours for said gas sensor.
- 7. (Original) The method of claim 3, wherein the embedded controller tracks O_2 and CO_2 operation times.
 - 8. (Original) The method of claim 4, wherein said gas sensor is an O_2 sensor.
 - 9. (Original) The method of claim 4, wherein said gas sensor is a CO2 sensor.
- 10. (Previously Presented) A predictive warning system for incubator gas sensor failure, comprising:

at least one gas sensor disposed in an incubator housing;

an embedded controller for analyzing the at least one gas sensor for failure by adjusting a percentage gas sensor lifetime hours measurement for a gas sensor;

normalizing the adjusted measurement of the gas sensor;

calculating a measurement for the sensor of a percentage lifetime hours used for comparison with its respective maximum percentage hours for said gas sensor; and an interface display for indicating said gas sensor failure to a user.

Docket No. 87289.2140 Application No. 09/917,904

Customer No. 30734

11. (Previously Presented) The predictive warning system of claim 10, wherein

said embedded controller tracks O₂ and CO₂ values by percentage.

12. (Original) The predictive warning system of claim 10, wherein said interface

display is resettable.

13. (Previously Presented) The predictive warning system of claim 10, wherein said

embedded controller tracks O₂ and CO₂ operation times.

14. (Original) The predictive warning system of claim 10, wherein said embedded

controller adjusts a percentage gas sensor lifetime hours every hour.

15. (Previously Presented) The predictive warning system of claim 14, wherein said

interface display indicates a warning message to said user once the percentage gas sensor

lifetime hours measurement exceeds a percentage of their respective maximum percentage hours

of said gas sensor.

16. (Original) The predictive warning system of claim 15, wherein said gas sensor is

an O2 sensor.

17. (Original) The predictive warning system of claim 15, wherein said gas sensor is

a CO₂ sensor.

Page 5 of 8

Customer No. 30734

sensor;

18. (Previously Presented) A predictive warning system for incubator gas sensor failure, comprising:

means for analyzing at least one gas sensor for lifetime adjustment;
means for adjusting a percentage gas sensor lifetime hours measurement for a gas

means for normalizing the adjusted measurement of the gas sensor;

means for calculating a measurement for the sensor of a percentage lifetime hours used for comparison with its respective maximum percentage hours for said gas sensor; and

means for displaying a warning message to a user once the percentage gas sensor lifetime hours measurement exceeds a percentage of said respective maximum percentage hours for said gas sensor.

- 19. (Original) The predictive warning system of claim 18, further comprising: means for adjusting the percentage gas sensor lifetime hours every hour.
- 20. (Previously Presented) The predictive warning system of claim 19, wherein the adjusted measurement of the gas sensor is normalized to an hour count and stored as a percentage measurement of lifetime hours used at a temperature of 20 degrees Celsius in an embedded controller.
- 21. (Previously Presented) The predictive warning system of claim 19, further comprising holding a gas concentration and a gas sensor temperature constant over a previous hour prior to performing the normalizing step.

Docket No. 87289.2140 Application No. 09/917,904

Customer No. 30734

22. (Previously Presented) The predictive warning system of claim 19, wherein an embedded controller tracks O₂ and CO₂ values by percentage.

- 23. (Previously Presented) The predictive warning system of claim 19, wherein an embedded controller tracks O₂ and CO₂ operation times.
- 24. (Original) The predictive warning system of claim 18, wherein said means for displaying a warning message to a user is resettable.
- 25. (Original) The predictive warning system of claim 20, wherein said gas sensor is an O₂ sensor.
- 26. (Original) The predictive warning system of claim 20, wherein said gas sensor is an CO₂ sensor.